

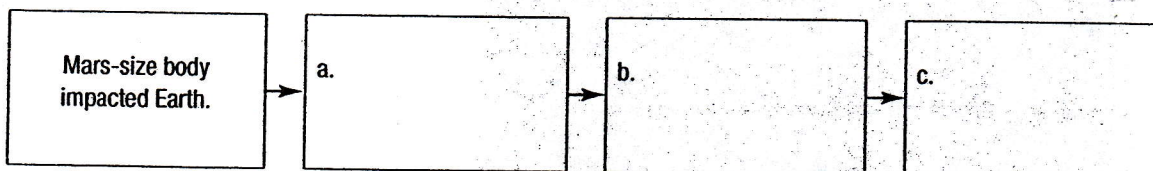
Chapter 22 Origin of Modern Astronomy

Section 22.3 Earth's Moon

This section describes the moon's structure, surface, and ideas about its origin.

Reading Strategy

As you read, complete the flowchart showing the stages leading to the formation of the moon. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.



1. The density of the moon is comparable to that of mantle rocks on _____.

The Lunar Surface

Match each description with its moon feature.

- | Description | Moon Feature |
|--------------------------------------------------------------------------------------------|--------------|
| _____ 2. densely pitted, light colored areas containing mountain ranges | a. regolith |
| _____ 3. ☾ dark, relatively smooth areas made of ancient beds of basaltic lava | b. maria |
| _____ 4. ☾ splash marks that radiate outwards for hundreds of kilometers | c. craters |
| _____ 5. long channels similar to valleys or trenches | d. rays |
| _____ 6. soil-like layer of igneous rock, glass beads, and fine lunar dust | e. highlands |
| _____ 7. ☾ round depressions produced by the impact of rapidly moving debris or meteoroids | f. rilles |

8. ☾ How did the maria on the moon's surface form? _____

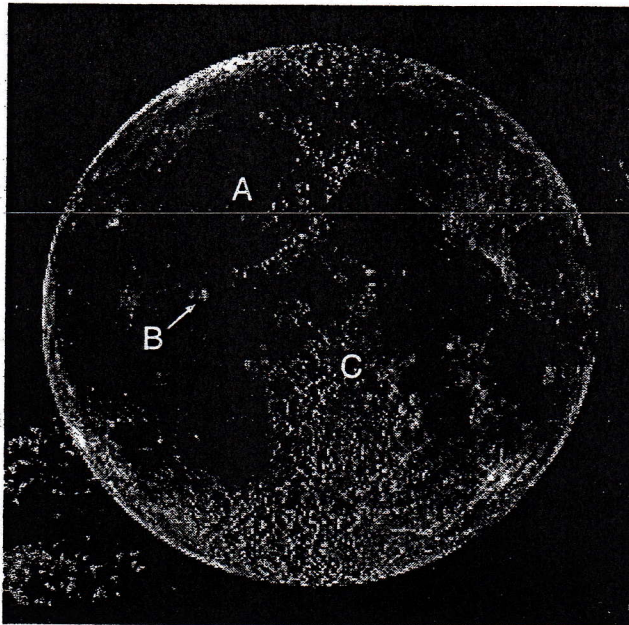
9. Complete the table below.

Characteristic	Highlands	Maria
Color		dark
Surface texture		
Mountains present?		
Rilles present?		


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10. Select the appropriate letter in the figure that identifies each of the following moon features.

_____ crater _____ highland _____ mare



Lunar History

11.  What is the most widely accepted theory of the moon's origin? _____

12. The greater the density of craters on the moon, the _____ the surface must be.
13. List the three phases in which the moon evolved in order from oldest to youngest.
 - a. _____
 - b. _____
 - c. _____
14. Is the following sentence true or false? Lava flows on the moon sometimes overlap highlands, showing that maria deposits are younger than highlands. _____
15. Why have very old craters on the moon not been erased as similar craters on Earth have been? _____

